AMENDMENTS TO THE SPECIFICATION:

Please amend paragraph [00091] beginning at page 15, line 29 as follows:

Whereas typically in other circuit analysis programs the matrix formulation of electrical circuit equations comprises implicit differential equations, such does not occur for electrical circuit analyzer 60. Rather, electrical circuit analyzer 60 sees the electrical circuit as expressed in terms of the frequency domain, Laplace transform domain, or *z*-transform domain, or as a mixture of these. In general, electrical circuit analyzer 60 reduces the circuit description to a linear and purely algebraic problem which advantageously can be solved straightforwardly. This reduction to a linear and purely algebraic problem results simply from the formation of the problem as a symbolic matrix problem. The admittance matrix comprises symbolic variables or expressions which are thereafter manipulated.

Please amend the paragraph [000235] beginning at page 41, line 17 as follows:

As observed in Expression 10, the contribution of the block Krakovians $\tilde{\mathbf{B}}$ disappears due to the zero vector I_n. The equation system $\mathbf{Y}_1\mathbf{V}_y = \mathbf{I}_y$, which is of exactly the same form as Expression 1, and contains all the information required to solving the relevant part of the equation system. However, it has been reduced with the size of A, to now only comprise $s = N - p$ equations. The elements of Y_1 will naturally be functions of elements of Y. In order to save memory in the program within which electrical circuit analyzer 60 executes (e.g., Matlab), the elements of $\mathbf{Y}_1$are now renamed to a new set of variables, which are functions of elements of Y.[[.]] These functions are written to a file, and can be evaluated during the analysis.